

## Text Summary

ALOHA® 5.4.7



### SITE DATA:

Location: BIG OX SSC, NEBRASKA  
Building Air Exchanges Per Hour: 0.96 (unsheltered single storied)  
Time: July 21, 2018 1200 hours CDT (user specified)

### CHEMICAL DATA:

Chemical Name: METHANE  
CAS Number: 74-82-8 Molecular Weight: 16.04 g/mol  
PAC-1: 65000 ppm PAC-2: 230000 ppm PAC-3: 400000 ppm  
LEL: 50000 ppm UEL: 150000 ppm  
Ambient Boiling Point: -259.5° F  
Vapor Pressure at Ambient Temperature: greater than 1 atm  
Ambient Saturation Concentration: 1,000,000 ppm or 100.0%

### ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)

Wind: 10.1 miles/hour from NNW at 3 meters  
Ground Roughness: open country Cloud Cover: 0 tenths  
Air Temperature: 61.1° F Stability Class: C  
No Inversion Height Relative Humidity: 73%

### SOURCE STRENGTH:

Direct Source: 101 cubic feet/min Source Height: 25 feet  
Source State: Gas  
Source Temperature: 70° F  
Source Pressure: 164.7 psia  
Release Duration: 60 minutes  
Release Rate: 48 pounds/min  
Total Amount Released: 2,878 pounds

### THREAT ZONE:

Threat Modeled: Flammable Area of Vapor Cloud  
Model Run: Gaussian  
Red : LOC is not exceeded --- (50000 ppm = LEL)  
Note: Threat zone was not drawn because  
the ground level concentrations never exceed the LOC.  
Orange: LOC is not exceeded --- (30000 ppm = 60% LEL = Flame Pockets)  
Note: Threat zone was not drawn because  
the ground level concentrations never exceed the LOC.  
Yellow: LOC is not exceeded --- (5000 ppm = 10% LEL)  
Note: Threat zone was not drawn because  
the ground level concentrations never exceed the LOC.